

## MARINE MAMMAL BIOLOGICAL SAMPLE LOG

The purpose of this log is to record sex, body measurements, and biological samples taken from all incidentally taken marine mammals. For more detailed instructions on incidental take sample collection, refer to the Marine Mammal Incidental Take and Biological Sampling Guidelines section of the NEFSC Observer Program Training Manual.

### INSTRUCTIONS

For instructions on completing the Header fields **A**, **B** and **C**, refer to the Common Haul Log Data section of the NEFSC Observer Program Manual.

If any of the measurements cannot be collected, record a dash (-) in the field and record the reason why it wasn't obtained in COMMENTS.

**1. PSID #:** Record the consecutive identification number (Protected Species ID) for each animal that is sampled during this trip. This should be the same number as recorded on the Incidental Take Log.

**2. SPECIES NAME:** Record the complete common name of each incidentally taken marine mammal biologically sampled on this trip, as listed in Appendix A. Species Names.

**NOTE:** If it is not possible to make a positive species identification, identify the animal to the most specific generic group of which you are positive, *i.e.* baleen whale, unidentified dolphin, seal *etc.*  
**DO NOT GUESS AT SPECIES IDENTIFICATION.**

**3. SEX:** Indicate the sex of the marine mammal by placing an "X" next to the appropriate code:

- 0 = Unknown.
- 1 = Male.
- 2 = Female.

**4. BODY TEMPERATURE:** Record, to the nearest tenth of a degree Fahrenheit, the dorsal musculature temperature. This measurements should be taken for all incidental takes of cetaceans and pinnipeds. It

must be taken as close as possible to the time the animal is brought onboard, and before cutting into the animal occurs. To take a temperature, always insert the probe gently, and keep probe entry sites consistent. See Figure 1, letter H for cetaceans and Figure 2, letter D for pinnipeds.

**5. BLUBBER THICKNESS:** Record, to the nearest tenth of a centimeter, the thickness of the blubber of the cetacean or pinniped. Measure from where the blubber meets the muscle, up to and including the skin.

**CETACEAN:** To obtain this measurement, make an incision two to three inches behind the blow hole of the marine mammal. See Figure 1, letter G.

**PINNIPED:** To obtain this measurement, make an incision in the ventral surface of the marine mammal, about five or six inches anterior to the navel, in the middle of the body. See Figure 2, letter D.

### BODY MEASUREMENTS

Six body measurements will be taken and recorded for each cetacean. Three body measurements will be taken and recorded for each pinniped.

When measurements are taken which require a mammal to be placed on one side, the preferred method is for the animal to be lying on the right side, *i.e.* **measurements taken on the left side**. The body measurements are diagramed and specified in Figures 1-3. All length measurements are recorded in whole centimeters.

Do not piece together animal parts that have been removed from the body to obtain these measurements. Rather, record a dash (-) in the field, and explain why the measurement is not taken in COMMENTS.

**6. TOTAL LENGTH:**

**CETACEAN:** Record the **straight line** length from the tip of the jaw (top or bottom jaw, whichever is longer) to the fluke notch. See Figure 1, letter A.

**PINNIPED:** Record the **straight line** measurement from the snout to the tip of the tail. See

Figure 2, letter A.

**7. GIRTH:** (circumference of animal)

**CETACEAN:** Record the girth of the animal just under the pectoral flippers at the axilla. See Figure 1, letter F.

**PINNIPED:** Record the girth of the animal just under the fore-flippers at the axilla. See Figure 2, letter C.

**8. HIND FLIPPER OR PECTORAL FLIPPER LENGTH:**

**CETACEAN:** Record the **straight line** length of one flipper of the cetacean. This length is taken from the outside or anterior edge of the flipper to the tip of the flipper. This is the longest length along the pectoral flipper. See Figure 1, letter B.

**PINNIPED:** Record the **straight line** length of one **rear** flipper of the pinniped. This length is taken from the outside anterior edge of the flipper at the joint where the flipper connects to the body (this is best located by flexing the flipper forward and measuring from the point where the flipper flexes) to the tip of the flipper. See Figure 2, letter B.

**9. PECTORAL FLIPPER WIDTH:**

**CETACEAN:** Using the same flipper on which the length was measured, record the **straight line** width, at its widest part. See Figure 1, letter C.

**PINNIPED:** No measurement taken; record a dash (-) in this field.

**10. DORSAL FIN HEIGHT:**

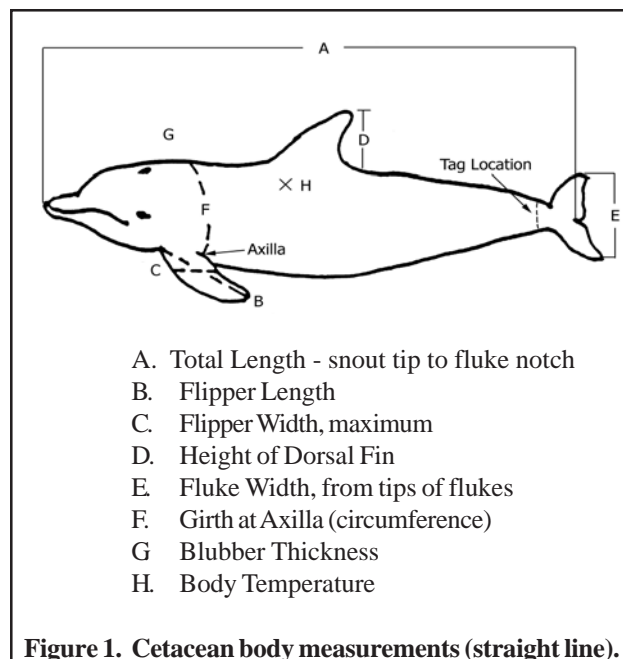
**CETACEAN:** Record the **straight line** height of the dorsal fin of the cetacean from the posterior tip of the fin to the insertion at the body. See Figure 1, letter D.

**PINNIPED:** No measurement taken; record a dash (-) in this field.

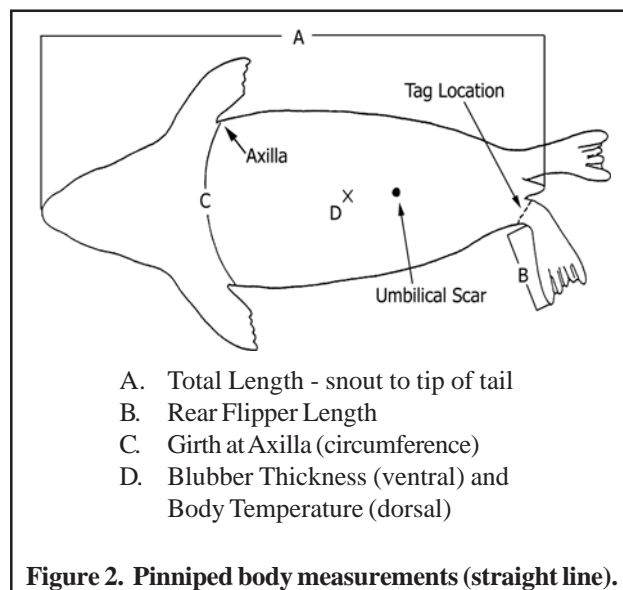
**11. FLUKE WIDTH:**

**CETACEAN:** Record the width of the flukes of the cetacean, from one tip to the other. See Figure 1, letter E.

**PINNIPED:** No measurements taken; record a dash (-) in this field.



**Figure 1. Cetacean body measurements (straight line).**



**Figure 2. Pinniped body measurements (straight line).**

**12. WHOLE ANIMAL RETAINED?:** Record "1" if the animal is retained by the observer to be brought to shore. Record "0" if the whole animal is not retained.

**JAW/TISSUE/ORGAN/HEAD SAMPLES**

Listed below are the samples that may be considered priorities for certain species. Refer to [Table 4. Marine Mammal Biological Sampling Priorities](#) in the

NEFSC Observer Program Biological Sampling Manual to find the specific sampling requests for each **cetacean** and **pinniped** species.

It is very important to determine, before you begin cutting a cetacean for jaw/tissue/organ/head samples, if you will be able to take a **BODY TEMPERATURE MEASUREMENT (#4)**. This measurement must be taken as close as possible to the time the animal is brought onboard, and before cutting into the marine mammal occurs.

For the following fields, record the **total number** of samples taken. If a sample is not taken, record a "0" (zero).

**13. FINCLIP/FLIPPER/SKIN:** If unable to collect sample prior to animal going overboard, always check the net/gear for skin that might be opportunistically collected.

**14. JAW**

**15. STOMACH**

**16. BLUBBER**

**17. MUSCLE**

**18. REPRODUCTIVE TRACT**

**19. HEAD/SKULL**

**20. OTHER:** Record the number of additional samples collected.

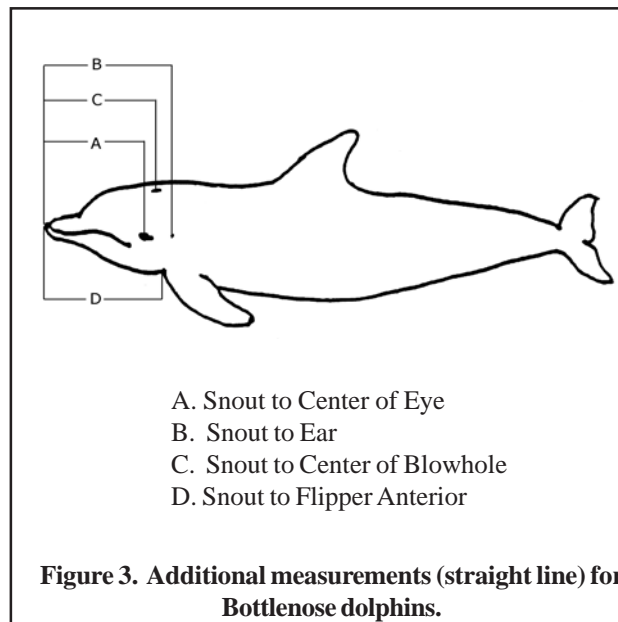
**NOTE:** If any additional sample(s) is (are) collected from this animal, record which ones in **COMMENTS**.

### ADDITIONAL MEASUREMENTS FOR BOTTLENOSE DOLPHINS

In addition to the body measurements required for all incidentally taken cetaceans, the following four measurements are to be taken for all bottlenose dolphins greater than 2 meters (approximately 7 feet) in total length: **snout to center of eye**, **snout to ear**, **snout to center of blowhole** and **snout to flipper anterior**. All measurements are **straight**, made parallel to longitudinal body axis. See Figure 3.

Keep in mind that these additional measurements

need to be taken before the head is removed. If time constraints necessitate choosing between taking the head or taking these additional measurements; take the head.



### COMMENTS

#### Animal specific:

For **each animal**, document how much of the animal was examined (i.e. only dorsal and lateral sides seen). Thoroughly sketch and describe identifying characteristics, new and/or healed wounds, the amount and location of scavenger damage and/or decomposition, the firmness and coloration of tissues, condition of the skin (i.e. cracked, sloughing, dull, glossy), the presence or absence of blood (record if bleeding), any missing parts, and smell. Include comments about the animal's behavior on deck and upon release (lethargic, active, calm, vocalizing, struggling, swam away, sank, floated at surface, righted itself, dove, etc). Also record the amount and location of gear remaining on the animal. Reference each description with the animal's unique PSID # (#1) and be sure to circle which side of the animal is illustrated.

#### General:

Record any additional information regarding the marine mammal incidental take(s), especially when data are unable to be collected. Reference each comment with its corresponding field name.